

# **AUTOFLIGHT INC.**

IM

Lateral Ejection Helicopter Seats
HUM V Mini Van

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Application/ControlNumber
10/645,044

June 17th, 2006

Dear Patent Examiner,

Michael L. Boauchamb

I, Michael L. Beauchamp, an inventor and the patent applicant have included a substitute specification which is the correct specification that complies with formalities for my patent application, "Method For Producing Lateral Ejection Apparattii For helicopter And Plane".

I look forward to further examining this vital new utility in re-examination, so that none of the important benefits of the new and use tool for aircraft is overlooked.

Thank you for your patience and professional work,

Chairman, CEO, Founder, Owner/Autoflight Inc., Lateral Ejerction Helicopter Seats,

HUM V Mini Van, Millennium Eagle Spacecraft Pictures Company

## Michael Lawrence Beauchamp

285 Turk St. #501 Street, San Francisco, CA. 94103 (415)756-7331 Jul. 2, 2003



# METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

Inventor: Michael Lawrence Beauchamp, California, United States

Appl. No.: 10/645, 044

Date Filed:

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# Other Helicopters with Sliding Doors:

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# METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

#### BACKGROUND OF THE INVENTION

#### Field of the invention

The new invention relates to the method and devices of aircraft or theoretically, objects in motion, specifically improvements and advantages, which, allow for the first time all occupants of helicopters and planes to eject laterally and safely from a helicopter or plane.

# Description of prior art

Until now the failing has been that occupant ejection was possible only on a horizontal and even longitudinal axis as in military fighter jets, leaving many thousands of individuals and parties without access to a timely means of emergency exit in [the] event of a helicopter or plane failure. Longitudinal ejection cannot provide for equal access to an emergency exit, because aircraft are built along the longitude, dictating [the] larger surface areas along [the] right and left latitude as a [the] sole reasonable and safe area for emergency exits of equal access in a commercial airliner. All ejection devices until now as cited in the references are void of an [the] ability to laterally eject a commercial aircraft or helicopter aircraft occupant

to safety. Subsequently, the weight of an aircraft occupant is now placed directly on load bearing triple monorails being employed for the first time. The extent to which the lateral ejection aerodynamic tool re-orders design throughout the complete range of fields defining aerodynamics is not limited to but can be defined as affecting Pat. Nos. cited in the references, which will have to under go moderate structural changes, so that in (50) fifty years time, most of the international air-fleet will possess lateral ejection equal-access total occupant timely emergency exit access. Moreover the lateral ejection tool is sightable by utilizing an aiming mechanism directed by a mechanized gear console handle and swing arm barrel sight seat swivel; only when existing fuselage area allows; actuated by cylindrical telescoping hydraulic arms capable of realizing near perfect, or, perfect theoretical, lateral ejection respective of the real time forward motion (pressure) of a failed aircraft, by targeting preferred seat trajectories towards any quadrant within a sphere when right and left bipolar seat pairs are configured in a combat or high-performance helicopter or plane; if said aiming mechanism operates independent of a robotic arm, which costs would perhaps become prohibitive except in luxury aircraft or military designs in an exemplary embodiment. The aiming mechanism-can work by pushing and pulling the lateral ejection mechanism with attached seat chassis, swinging from a center console containing the blast shield and a swivel plate on which the triple monorails and seat are mounted. Practically, the lateral triple monorails may be mounted by bolts and welding to any seat portal and sighted to eject 90 degrees perpendicular to the horizontal longitudinal axis, or, sighted along the angle 4 to 6 degrees preferred aft of the perpendicular in order to avoid a failed aircraft roll; in accordance with the spirit of the lateral ejection objectives; again, depending upon area limitations imposed by existing aircraft occupancy design, the 90 degrees, right-angle can be the common sighting, and is shown here in the abstract and drawings installed in a corporate helicopter fuselage, sighted at 90 degrees with bottom mounted tail fins turned 4 to 6 degrees aft of the aircraft occupancy. Multiple altitude appropriate parachutes could be added to each seat chassis to advantage with this invention, especially in commercial airliners. In

other words, the preferred embodiment and the most important considerations of the lateral ejection invention are described here, not the exciting design implications of the lateral ejection utility, I just described.

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# METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

#### SUMMARY OF THE INVENTION

Therefore, I have invented a method and stable mechanism by which accordingly all aircraft occupants of helicopters or planes are ejectable. Subsequently, a [the] weight of an aircraft occupant is now placed directly on load bearing triple monorails being employed for the first time. The extent to which the lateral ejection aerodynamic tool re-orders design throughout a [the] complete range of fields defining aerodynamics is not limited to but can be defined as affecting Pat. Nos. cited in the references, which will have to under go moderate structural changes, so that in [(50) fifty] years time, most of the international air fleet will possess lateral ejection equal access total occupant timely emergency exit access. Moreover the lateral ejection tool is sightable by utilizing an aiming mechanism directed by a mechanized gear console handle and swing arm barrel sight seat swivel; only when existing fuselage area allows; actuated by cylindrical telescoping hydraulic arms capable of realizing near perfect, or, perfect theoretical, lateral ejection respective of a [the] real time forward motion (pressure) of a failed aircraft, by targeting preferred seat trajectories towards any quadrant within a sphere when right and left bipolar seat pairs are configured in a combat or high performance helicopter or plane; if said aiming mechanism operates independent of a robotic arm, which costs would perhaps become prohibitive except in luxury aircraft or military designs in an exemplary embodiment. An [The] aiming mechanism can work by pushing

and pulling the lateral ejection mechanism with attached seat chassis, swinging from a center console containing a [the] blast shield and a swivel plate on which [the] triple monorails and seat are mounted. Practically, [the] lateral triple monorails may be mounted by bolts and welding to any seat portal and sighted to eject 90 degrees perpendicular to a [the] horizontal longitudinal axis of an aircraft fuselage, or, sighted along the angle 4 to 6 degrees preferred [aft] of a [the] perpendicular in order to avoid a failed aircraft roll; in accordance with the spirit of the lateral ejection objectives; again, depending upon area limitations imposed by existing aircraft occupancy design, [the] 90 degrees, right-angle can be a [the] common sighting, and is shown here in the abstract and drawings installed in a [corporate helicopter] fuselage, sighted at 90 degrees with bottom mounted tail fins turned 4 to 6 degrees aft of an [the] aircraft occupancy. Multiple altitude appropriate parachutes are could be added to each seat chassis to advantage with this invention, especially in commercial airliners. In other words, the preferred embodiment and the most important considerations of the lateral ejection invention are described here, not the exciting design implications of the lateral ejection utility, I just described. The method of lateral ejection, which apparattii are produced by arranging any set of tracks or guide rails, here a set of load bearing triple monorail tracks with circumventing roller trucks often associated with skateboarding wheel "trucks", arranged laterally on a right angle to each other, along a [the] bottom underside and back of an aircraft occupant accommodation, here known as a seat chassis. A [The] seat chassis preferred embodiment features a pair of circumventing roller trucks guided monorail tracks attached to a [the] bottom underside of a [the] chassis with a third monorail with circumventing roller trucks along a [the] back and at a right angle to a [the] bottom two monorails. [The] Circumventing roller trucks insure stable ejection pitches during foreseen catastrophic rolls, spins or spin and roll movements, impacts and collisions of a failed aircraft. Additionally, as depicted in a [the] preferred embodiment, the lateral ejection apparatus affixes to any aircraft seat or seat platform by means of an integrated construction system mold constituting [the] flange and drillable top outer surface of a [the] monorails

outer track box. A [The] seat chassis and outer track box are prevented from moving along [the] wheel trucks of [the] inner monorails by [the] rocket catapults secured to  $\underline{a}$  [the] protective blast shield. This connection between [the] catapults and[ the] blast shield, secures a [the] seat chassis in position on [the] tracks until when [the] catapults burst [the] connection seals upon ignition of [the] ejection sequence. Deployable head, neck and chest airbags along both sides of a [the] seat chassis and for positioning [the] legs and torso for safe ejection are necessary to the invention. A [The] rocket propelled greater sliding door panel with an interior fixed conventional hinge door has a pair of adequate pneumatic devices at a [the] top and bottom of a [the] sliding greater emergency door panel; with [two common] latch catches to prevent a [the] sliding door panel from recoiling into a [the] path of an [the] ejecting seat chassis. At least three cylindrical compartments, which attach horizontally to a [the] back of a seat chassis, and contain three altitude appropriate parachutes with a hermetically sealed sensor fuse box are optimal with this invention. A [The] sliding door is configured to open only during an emergency ejection sequence, while a [the] conventional hinge type door is an [the] operational door for use by pilots or To anyone skilled in these arts, the features, objects, and advantages are obviously apparent, if not so already, but must be expounded while reading the proceeding detailed description of the invention, referring to the drawings.

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# METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

#### BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. 1 is a transparent side view of an aircraft occupancy, here a helicopter fuselage with two [of the] main lateral ejection components, triple monorails, mounted on a [the] supporting track launcher platform with legs in which [the] bottom tail fins are slotted.
- FIG. 2 is a side view of an aircraft occupancy, [here a helicopter] with a closed fixed emergency greater sliding door panel with [, and] interior operational conventional hinge door.
- FIG. 3 is a side view of  $\underline{an}$  [the] aircraft occupancy, and  $\underline{a}$  [the] fixed emergency greater sliding door panel with interior operational conventional hinge door transversing  $\underline{an}$  [the] aircraft fuselage by means of pneumatic rockets.
- FIG. 4 is a side view of <u>a</u> [the] path of the laterally ejecting outer track box with attached seat chassis, after ejecting from <u>an</u> [the] aircraft occupancy.
- FIG. 5 is a side view of [the] laterally ejected devices initiating parachute extraction by means of standard drogue chute extraction, after [the] ejected apparattii have cleared  $\underline{a}$  [the] tail of  $\underline{an}$  [the] aircraft.
- FIG. 6 is a side view of [the] main triple monorail components of the triple monorail lateral ejection method.

- FIG. 7 is a side view of <u>an</u> [the] outer track <del>box to which any seat chassis can be</del> mounted and is movable along [the] inner tracks and supporting tracks.
- **FIG. 8** is a side view of [the] triple monorails after  $\underline{an}$  [the] outer track box has been ejected, revealing  $\underline{a}$  [the] blast shield and catapult rocket base seals on  $\underline{a}$  [the] blast shield.
- FIG. 9 is an anterior side perspective view of [the] triple monorails, showing a [the] blast shield, and three monorail track support columns.
  - FIG. 10 is a transparent top, side or bottom view of  $\underline{a}$  [the] back monorail track.
- FIG. 11 is a transparent top, side or bottom view of one of [the] two bottom positioned monorail tracks.
  - FIG. 12 is top view of a [the] supporting track roller trucks configuration.
- FIG. 13 is a top view of  $\underline{a}$  [the] corner elbow supporting track roller trucks configuration.
- FIG. 14 is a top view of an aircraft seat with three parachute cylinders [along a the back].
- FIG. 15 is a top transparent view of  $\underline{a}$  [the] hermetically sealed altitude appropriate parachute ignition fuse box.

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# METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

#### DETAILED DESCRIPTION OF THE INVENTION AND DRAWINGS

FIG. 1 shows an aircraft occupancy, in this instance that of a helicopter having a fuselage 37, which is large enough to be fitted with two triple monorail ejection devices FIG. 6, on each side of an [the] aircraft one behind an [the] other. FIG. 1 is a transparent side view of an aircraft occupancy, [here a helicopter fuselage] with two [of the] main lateral ejection components FIG 6, triple monorails, mounted on a [the] supporting track launcher platform with legs 9, in which [the] bottom tail fins are slotted. A [The helicopter] fuselage has a set of sliding door 34, tracks 30,31, an interior operational conventional hinge door 33, and an exterior sliding door arm 32, located near a [the] lower right corner of an [the] sliding emergency greater door panel. [46, are the] Spring loaded latch catches 46, [to] prevent [the] recoiling of a [the] sliding greater door panel.

FIG. 2 is a side view of an aircraft occupancy, [here a helicopter] with a closed fixed emergency greater sliding door panel 34, with [and] interior operational conventional hinge door 33.

FIG. 3 is a side view of <u>an</u> [the] aircraft occupancy 37, and <u>a</u> [the] fixed emergency greater sliding door panel 34, with interior operational conventional hinge door transversing <u>an</u> [the] aircraft fuselage by means of pneumatic rockets 35,36. FIG. 3 also shows a seat chassis 38, as it is fitted onto triple monorail [ejection devices] FIG. 6., during [the] ejection

sequence when [the] airbags 40, 41, and <u>a</u> [the] seat chassis, right side airbag 42, open simultaneous with [the] pneumatic rockets 35, 36 transversing <u>an</u> [the] emergency greater sliding door panel to <u>a</u> [the] rear of <u>a</u> [the] fuselage.

- FIG. 4 is a side view of <u>a</u> [the] path of <u>a</u> [the] laterally ejecting outer track box 5, with attached seat chassis 38, after ejecting from <u>an</u> [the] aircraft occupancy, and guided towards clearing <u>a</u> [the] tail of <u>an</u> [the] aircraft by <u>an</u> [the] outer track box 5, tail fins 11. <u>A</u> [The] left side head, neck, and chest protector airbag 43, is shown with the right side airbag concealed behind it 42.
- FIG. 5 is a side view of [the] laterally ejected devices initiating parachute extraction by means of standard drogue chute 39, extraction, after [the] ejected apparattii have cleared a [the] tail of an [the] aircraft. Similarly, to FIG. 4, FIG. 5 identifies [the] left side seat airbag 43.
- FIG. 6 is a side view of [the] main triple monorail components of the triple monorail lateral ejection method, comprising two bottom monorails 1, and one monorail positioned at a right angle 2, to a [the] bottom two monorails. Each monorail consists of wheel truck axel bases 3, and truck rollers 4. [The] Monorails are surrounded by an outer track box 5, which is movable laterally along [the] triple monorails, and to which a [any] seat may be attached by means of a flange 44, located at a [the] top interior corner of an [the] outer track box; and by a drillable surface 45, on an [the] outer track box at a [the] center of a [the] lower top section of an [the] outer track box. When bolting or welding at a [the] drillable area 45, one must leave room for [the two] rocket catapults 6,7 which are housed in a [the rectangular] area between a [the] bottom two monorails and directly below a [the] drillable surface area, 45. FIG. 6 clearly shows a [the] support track 8, including [the] corner elbow section 12, and [the rubber] knobs 14, which seal [these] tracks from open air contact, along with a [mesh cloth] cover 13, depicted partially and in transparency. The device further is supported on launcher platform legs 9, a blast shield 10, seen partially in FIG. 6, and divided such that two bottom mounted tail fins 11, are slotted between [the] platform

legs. An [The] area of circumference B, designates [the] angle , being a [the] distance between [the] launcher platform legs in which [the] tail fins are slotted as a [the] maximum angle [the] tail fins may exit [the] leg hole slots. A [24, is the] hermetically sealed sensor fuse box 24, attached by a rip cord to both an [the] outer track box and a [the] blast shield. A [The] rip cord 26, FIG. 15, opens a [the] hermetic seal of a [the] sensor fuse box upon separation of an [the] outer track box from an [the] aircraft fuselage during ejection, allowing for a controlled triggering of an [the] appropriate parachute.

FIG. 7 is a side view of [the] outer track box 5, to which any seat chassis can be mounted and is movable along [the] inner tracks and supporting tracks. A [The] corner elbow right angle connector 12, which attaches a [the] lower portion of an [the] outer track box to an [the] upper portion of an [the] outer track box is an [a standard] elbow coupling device of triangular right angle construction. Both tail fins can be seen in FIG 7, in their unslotted posture, while [the] rocket catapults 6, 7, are concealed behind an [the mesh cloth] end cover. 24, FIG. 7, shows [the] sensor fuse box as attached to an [the] outer track box after separation.

FIG. 8 is a side view of [the] triple monorails after an [the] outer track box has been ejected, revealing an [the] upper portion of a [the] blast shield 15, and catapult rocket base seals 16, 17 on a [the] blast shield, and which base seals prevent an [the] outer track box from moving or sliding on either [the] monorail inner tracks 1,2, or [the] support track 8. These two seals 16,17 are a [the only] locking mechanism which prevent an [the] outer track box from moving prior to ejection, and which seals are burst do to [the] ignighting of [the] rocket catapults and [the] combustion expansion within [the] seals which sheer a [this only] locking connection between [the] launcher platform base and [the] movable outer track box.

FIG. 9 is an interior side perspective view of [the] triple monorails, showing  $\underline{a}$  [the] blast shield 15, [in its entirety,] and three monorail track support columns 21, 22, 23.  $\underline{A}$  [46, is the] back reinforcing panel  $\underline{46}$ , of  $\underline{a}$  [the] launcher platform.

- FIG. 10 is a transparent back view of  $\underline{a}$  [the] back monorail track 2, a cross sectional piece of  $\underline{a}$  [the] blast shield 15, and [the] roller truck wheel bases 3, supporting [the] roller truck wheels 4. FIG. 10, line C is a back side view of  $\underline{a}$  [the] back monorail track support column, and 21, FIG. 10  $\underline{a}$  [the] same support column 21, as it looks next to  $\underline{a}$  [the] back reinforcing panel of a [the] launcher platform 46.
- FIG. 11 is a transparent top, side or bottom view of one of [the] two bottom positioned monorail tracks 1, a cross sectional piece of  $\underline{a}$  [the] blast shield 15, a cross sectional of  $\underline{an}$  [the mesh cloth] end cover 13, [the] roller truck bases 3, and [the] roller truck wheels 4. Line A-A corresponds with line A-A of FIG 14, and represents [the] positioning of  $\underline{a}$  [the] monorail lower front monorail track beneath [the] knee and thigh of [the] seat chassis occupant. [23 is]  $\underline{A}$  top view cross sectional piece of  $\underline{a}$  [the] bottom monorail track support column, 23.
- FIG. 12 is top view of  $\underline{a}$  [the] supporting track 8, roller trucks configuration 3, 4, which is identical to [the] roller trucks 3, 4, design used on [the] inner monorail tracks 1. Also shown is  $\underline{a}$  [the] joining abutment between  $\underline{a}$  [the] blast shield 15, and [the] support track 8. FIG. 12, 23 shows how  $\underline{a}$  [the] support column 23, intersects a portion of  $\underline{a}$  [the] supporting track roller truck alignment, and [the] other portion of  $\underline{a}$  [the] supporting track roller trucks is aligned perpendicular to  $\underline{a}$  [the] horizontal longitude of  $\underline{a}$  [the] blast shield.
- FIG. 13 is a top view of  $\underline{a}$  [the] corner elbow 12, supporting track 8, roller trucks configuration 3, 4, and [the mesh cloth] end cover 13.
- FIG. 14 is a top view of an aircraft seat with three parachute cylinders 18, 19, 20, along <u>a</u> [the] back of <u>a</u> [the] seat chassis. Line A-A is <u>a</u> [the] position of <u>a</u> [the] monorail track shown in FIG. 11, beneath [the] knee and thigh of <u>a</u> [the] seat chassis occupant. 21, 22, 23, are top views of [the] inner monorail tracks support columns.
- FIG. 15 is a top transparent view of [the] hermetically sealed 25, altitude appropriate parachute ignition fuse 28, box 24, which is connected to a [the] blast shield 15, by a rip cord 26, and rip cord base 27, that pull a [the] hermetic seal 25, from a [the] fuse box 24,

upon ejection of <u>an</u> [the] outer track box from an aircraft to which <u>a</u> [the] fuse box can be attached on <u>a</u> [the] top outer portion of <u>a</u> [the] back portion of <u>an</u> [the] outer track box. <u>An</u> [29 is the] ignition wire <u>29</u>, for [the] three altitude appropriate parachutes 18, 19, 20.

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# METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

## I claim;

1. (Original) The method for producing lateral ejection apparattii for helicopter or plane comprising;

an aircraft occupancy, shown here as a helicopter with a set of seat chassis' mounted on a set of rails of any type, ideally depicted on load bearing triple monorails. Load bearing triple monorails with one-hundred sixty-eight circumventing roller trucks attached to the inner rails, and covered along the barrel end by mesh;

An outer track box movable along the seat tracks;

A monorail supporting track with eighty-four roller trucks;

an outer track movable box to which any seat chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom positioned tail fins slotted within the ejection monorails launcher platform legs;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed; an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which design is prevented from recoiling into the path of the ejecting occupant and device by a common latch;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes;

a hermetically sealed fuse box with a rip cord attached to the blast shield in which altitude sensitive fuses for opening the desired altitude appropriate parachutes are contained;

a anterior side mounted blast shield and monorail inner track support to which a pair of ejection catapult rockets are sealed until ignited, thereby preventing the outer track box and seat chassis from moving along the inner and supporting tracks.

- 2. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 1, where a set of tracks are constructed laterally or perpendicular to the horizontal longitudinal axis of an aircraft occupancy.
- 3. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where a set of three monorail tracks are constructed in a right angle configuration with two monorails forming a base to which the third or back monorail is aligned.
- 4. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 3, where a set of triple monorails are surrounded by an outer track box to which any seat chassis can be mounted, and which is movable along the monorail inner tracks and launcher platform supporting track structure.
- 5. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 4, where an ejection outer track box which can attach to any seat chassis is prevented from moving along the monorail and supporting tracks prior to

the lateral ejection sequence by burst able seal locks connecting two rocket catapults housed within the outer monorail track ejection box between the bottom monorail inner track casing to a blast shield joined to three support columns, supporting the triple monorail inner tracks with attached roller trucks.

- 6. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where a pair of tail fins are arranged beneath a seat chassis in order to guide the seat chassis after ejection on a curved path away from the roll and spin area of a failed aircraft.
- 7. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 6, where the bottom mounted tail fins which guide the ejecting seat chassis trajectory, and are attached to an outer monorail track box to which any seat chassis may be fixed.
- 8. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 7, where the bottom mounted tail fins attached to the outer monorail track box are slotted within legs of a launcher platform, which platform further supports a supporting track supporting both the outer and inner monorail tracks.
- 9. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where an emergency greater sliding door panel with an interior operational conventional hinge door is propelled out of the path of the ejecting occupants by pneumatic rockets located at the top and bottom of the front interior portion of the sliding greater door panel, and prevented from recoiling into the path of the ejecting occupants by a set pair of latch catches located on the side of the aircraft fuselage between the upper and lower sliding door panel tracks.
- 10. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where multiple airbags are employed for positioning the legs, torso and head of an occupant, and dual side seat chassis airbags to protect the head, neck

and chest of an occupant while laterally ejecting from an aircraft by means of rocket catapult propulsion.

- 11. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where at least three compartments for altitude appropriate parachutes are affixed to the ejecting seat chassis.
- 12. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where at least three altitude appropriate parachutes are controlled by a hermetically sealed sensor fuse box that can be mounted on the top outer portion of the back outer monorail track, and activated by a simple rip cord fixed to the interior of the aircraft or a blast shield, which rip cord upon ejection opens the hermetic seal of the parachute fuse box, exposing multiple altitude sensitive fuses to altitude pressures; whereby the appropriate parachute drogue extraction is commenced in sequence.
- 13. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where a blast shield is placed in the interior or the aircraft to both facilitate ejection rocket launch, and to prevent the after burn of the rocket catapults from destroying or harming the occupants and devices on the opposite side of the aircraft; also employing a blast shield for lateral ejection.
- 14. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 1, where any seat chassis has at least three compartments attached to the back of the seat chassis and contain at least three altitude appropriate parachutes for safe lateral ejection.
- 15. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 3, where three monorail tracks are constructed such that the inner monorail tracks support an outer monorail track box which moves along the inner monorail tracks by means roller truck wheels.

- 16. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 4, where the supporting track structure of the launcher platform employs roller truck wheels to support the movable outer track box and inner tracks.
- 17. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 3, where three monorail tracks are supported by three support columns located on the interior of the aircraft and molded to the inner monorail tracks at right angles.
- 18. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 3, where the triple monorail tracks are supported by a launcher platform base support track, three support columns molded to the inner monorail tracks interior ends, and by a blast shield molded to the launcher platform, support track, and three support columns.
- 19. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 3, where an aircraft fuselage, including helicopters and planes is large enough to accommodate multiple lateral ejection devices without reducing the number of occupant accommodations.
- 20. (Original) The method for producing lateral ejection apparattii for helicopter or plane of claim 2, where an aircraft fuselage has either the design changed or number of occupant accommodations reduced in order to install lateral ejection devices.
- 21. (Withdrawn) Method for producing lateral ejection apparattii for helicopter or plane comprising, an aircraft fuselage with an interior guide track or rail system arranged perpendicular

an aircraft fuselage with an interior guide track or rail system arranged perpendicular to the horizontal longitudinal axis of an aircraft fuselage, to which an aircraft seat framework, known as a, chassis or apparattii is attached and which apparatus or apparattii are rocket catapulted from an aircraft fuselage, by said means rocket catapult, so that a triple parachute configuration with a powered rotor motor harness

and sensor fuse box with multiple sensors and fuses for activating the appropriate parachute based on ambient pressure can be deployed to recover an aircraft occupant; two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, necessary for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes, inside ejection rigid framework back;

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive senors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes;

laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe mainlock and ignition release key nozzle collar;

with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;

a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants.

22. (Withdrawn) The method for producing lateral ejection apparattii for helicopter or plane comprising;

an aircraft fuselage with a single and/or double track, track and guide rail system arranged perpendicular to the horizontal longitudinal axis of an aircraft interior;

in a single or double track construction, a number of rocket catapult chambers are used, which are correspondingly rocket catapult chambers, 1bb, 2bb and/or 3bb. Moreover the lateral ejection tool is sightable by utilizing an aiming mechanism FIG. 1B, directed by a mechanized gear console handle 13B, and swing arm barrel sight seat swivel 14B for rotor positioning the occupant; only when existing fuselage area allows; actuated by cylindrical telescoping hydraulic arms 15B, and 16B, capable of realizing near perfect, or, perfect theoretical, lateral ejection respective of the real time forward motion (pressure) from velocity and position of a failed aircraft, by targeting preferred seat trajectories 9B, 10B, 11B, 12B, towards any quadrant within a sphere when right and left bipolar seat pairs FIG. 1B, are configured in a combat or high performance helicopter or plane; if said aiming mechanism operates independent of a robotic arm, which costs would perhaps become prohibitive except in luxury aircraft or military designs in an exemplary embodiment. The aiming mechanism can work by pushing and pulling rotor positions on the lateral ejection track and guide rail with attached seat chassis, swinging from a center console 13B, containing a ceramic tile with alloy or metallic backing blast shield, and a swivel plate 14B, on which a single track, double track or triple monorail track are attached without overburdening the

aircraft with additional weight; including attached simply to an aircraft floor or wall without a center console, riser or launcher platforms;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, necessary for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes, inside ejection rigid framework back:

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive senors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes;

laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom

or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe mainlock and ignition release key nozzle collar;

with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;

a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants.

23. (Withdrawn) The method for producing lateral ejection apparattii for helicopter or plane comprising;

an aircraft fuselage, with a, or, a set of seat chassis' mounted on triple monorails, and covered along the guide track end by a teflon mesh or teflon coated metallic mesh end cover;

a monorail supporting track;

an outer track, guide rail box to which any seat chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom rotor positioning tail fins slotted within the ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom-mounted tail fins can be turned and still exit the launcher platform leg slots;

laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes inside ejection rigid framework back;

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive senors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes;

laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe mainlock and ignition release key nozzle collar;

with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;

a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants.

24. (Withdrawn) The method for producing lateral ejection apparattii for helicopter or plane comprising;

an aircraft fuselage, with a, or, a set of seat chassis' mounted on triple monorails, load bearing triple monorails with one-hundred twenty-six roller trucks and two-hundred fifty-two teflon or other fire resistant material coated, circumventing roller truck wheels attached to the inner rails monorail roller trucks grid, and a supporting track grid with forty-two roller trucks and eighty-four roller truck wheels;

a monorail supporting track;

an outer track, guide rail box to which any seat chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom rotor positioning tail fins slotted within the ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom-mounted tail fins can be turned and still exit the launcher platform leg slots;

laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

an ejection guide rail monorail roller truck and roller truck wheels construction, which is a self ventilating grid formation for ducting heat caused by fire or enemy fire, thereby said ventilating preventing or minimizing track freezing or similar failure of a guide track and rail system due to severe friction of metallic or alloy tracks, a track and guide rail expanding against one another from exposure to very high temperatures;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes;

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive senors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard

fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes;

laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe mainlock and ignition release key nozzle collar;

with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;

a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants.

25. (Withdrawn) The method for producing lateral ejection apparattii for helicopter or plane comprising, a bed

for sleeping, rest, or emergencies attached to long, perpendicularly arranged track, guide rail or apparattii rocket catapulted propelled laterally out of an aircraft fuselage interior by a rocket catapult system;

a monorail supporting track;

an outer track, guide rail box to which any seat chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom rotor positioning tail fins slotted within the ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom-mounted tail fins can be turned and still exit the launcher platform leg slots;

laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

an ejection guide rail monorail roller truck and roller truck wheels construction, which is a self ventilating grid formation for ducting heat caused by fire or enemy fire, thereby said ventilating preventing or minimizing track freezing or similar failure of a guide track and rail system due to severe friction of metallic or alloy tracks, a track and guide rail expanding against one another from exposure to very high temperatures;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel or door, which design is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, necessary for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes;

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive senors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes;

laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe mainlock and ignition release key nozzle collar;

with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;

a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants.

- 26. (Withdrawn) An aircraft fuselage for lateral ejection apparattii which is enlarged and has additional supporting aircraft fuselage struts and structural supports installed in the fuselage frame structure with slender tempered glass panes added to the fuselage frame in order to accommodate the lateral ejection apparattii with the same near number of aircraft seats, and improved field of view for the aircraft pilots, crew, passengers or other occupants.
- 27. (Withdrawn) A safe, stable and efficient process, methodology, devices and apparattii, whereby all occupants of aircraft, be they helicopters or planes, or, like action crossovers, such as gyroplanes or spacecraft designed to fly like planes, are laterally ejected from an imperiled and life threatening said aircraft;

providing laterally aligned escape devices for all types of private, business, commercial, government and general aviation aircraft, which lateral ejection apparattii are stable, reliable, simple, efficient, safe and effective at extracting aircraft occupants from life threatening aircraft, whether they are sitting in a seat or lying down in a bed, or in an aircraft cabin or cockpit;

a method and process of escaping life threatening aircraft by rocket catapult propulsion and a unique multiple parachute configuration to extract pilots, passengers, emergency and medical patients in seats, beds or apparattii from life threatening aircraft by configuring rigid ejection apparattii framework perpendicular to aircraft longitudinal horizontal axis and propelling said occupant or occupants out the side of said aircraft by a rocket catapult system, past an emergency pneumatic rocket actuated sliding aircraft door or panel, wing strut, support or other propulsed object in the lateral ejection pathway, so then an automatic parachute system can deploy, and lower or recover the laterally ejected occupant or occupants to the ground or surface.

- 28. (Withdrawn) Teflon or other fire resistant material, primarily on the outer surface, but not limited to the outer surfaces of a seat or bed or apparattii right and left side mounted, pressure sensitive airbags, and roller truck wheels, and track mesh end cover to prevent fire or enemy fire from burning or hitting the ejected occupant or occupants, or igniting the guide track or igniting the roller truck wheels.
- 29. (Withdrawn) An advantageous arrangement combining the advantages of conventional jet aircraft vertically seeking ejection apparatus with the advantages of lateral ejection apparattii and process.
- 30. (Withdrawn) When aircraft seats and their occupants can be aligned and usually are in commercial and private aircraft, along the edge of the planes right and left latitudes, and ejected laterally; thereby, when an aircraft is in an upright posture minimizing both the applied force of gravity pulling down on the seat and seat occupant and distance, angle and altitude of recovery and rocket power off during the apparatus transversing from point A to point B; so to be removed by the lateral ejection apparattii powered by a rocket catapult and moving from point A to point B along the same or near same gravitational plane along a preferred angle of descent and recovery when ejected laterally from a plane in a dangerous or life threatening descent; so that an automatic, individual parachute system can be automatically

activated and deployed to break and stabilize the plane occupant(s) descent to a surface, after ejecting laterally from a plane.

- 31. (Withdrawn) Separately falling seats and parachutists in aircraft that are laterally ejected perpendicular to the horizontal longitudinal axis of an aircraft fuselage in seat rows aligned in aisles on a reloading chain and gas engine powered track and guide rail lateral ejection apparattii are also constructed for laterally ejecting aircraft occupants who are arranged in rows and aisles.
- 32. (Withdrawn) Rotor positioning apparattii and aircraft occupants for lateral ejection from an upright, rolled or rolling aircraft fuselage
- 33. (Withdrawn-currently amended) Method for producing lateral ejection apparattii for helicopter or plane comprising,

an aircraft fuselage with an interior guide track or rail system arranged perpendicular to a [the] horizontal longitudinal axis of an aircraft fuselage, and attached to [which] an aircraft seat [framework, known as] a, chassis or apparattii; is attached and which apparatus or apparattii are rocket catapulted from an aircraft fuselage, by said means a rocket catapult; [, so that a triple] three or more parachutes configuration with a powered rotor motor harness and sensor fuse box with multiple sensors and fuses for activating the appropriate parachute based on ambient pressure can be deployed to recover an aircraft occupant;

[two sets dual] airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, necessary for safe lateral equal access emergency exit ejection;

three compartments for altitude appropriate parachutes, inside ejection rigid framework back;

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening a [the] desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and

effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes;

laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

Laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

a seat chassis able to eject laterally by [the] opening of an emergency pneumatic rocket propelled fixed greater sliding door. panel, in which, a operational conventional hinged door is housed;

- an emergency fixed greater sliding door panel with pneumatic rockets located at a [the] top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;
- two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- —a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar;
- —with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants;
- an aircraft fuselage with a single and/or double track, track and guide rail system
  arranged perpendicular to the horizontal longitudinal axis of an aircraft interior;
  in a single or double track construction, a number of rocket catapult chambers are used, which are correspondingly rocket catapult chambers, 1bb, 2bb and/or 3bb.
  Moreover the lateral ejection tool is sight-able by utilizing an aiming mechanism FIG.

1B, directed by a mechanized gear console handle 13B, and swing arm barrel sight seat swivel 14B for rotor positioning the occupant; only when existing fuselage area allows; actuated by cylindrical telescoping hydraulic arms 15B, and 16B, capable of realizing near perfect, or, perfect theoretical, lateral ejection respective of the real time forward motion (pressure) from velocity and position of a failed aircraft, by targeting preferred seat trajectories 9B, 10B, 11B, 12B, towards any quadrant within a sphere when right and left bipolar seat pairs FIG. 1B, are configured in a combat or high performance helicopter or plane; if said aiming mechanism operates independent of a robotic arm, which costs would perhaps become prohibitive except in luxury aircraft or military designs in an exemplary embodiment;

-the aiming mechanism can work by pushing and pulling rotor positions on the lateral ejection track and guide rail with attached seat chassis, swinging from a center console 13B, containing a ceramic tile with alloy or metallic backing blast shield, and a swivel plate 14B, on which a single-track, double track or triple monorail track are attached without overburdening the aircraft with additional weight; including attached simply to an aircraft floor or wall without a center console, riser or launcher platforms; — a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, necessary for safe lateral equal access emergency exit ejection;

- three compartments for altitude appropriate parachutes, inside ejection rigid framework back:
- a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; —laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;
- minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;
- laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current

flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

- a seat chassis able to eject laterally by the opening of an emergency pneumatic
   rocket propelled fixed greater sliding door panel, in which, a operational conventional
   hinged door is housed;
- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; —two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar;
- —with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants;

- an aircraft fuselage, with a, or, a set of seat chassis' mounted on triple monorails, and covered along the guide track end by a teflon mesh or teflon coated metallic mesh end cover;

a monorail-supporting track;

an outer track, guide rail box to which any seat chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom rotor positioning tail fins slotted within the ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom mounted tail fins can be turned and still exit the launcher platform leg slots;

Laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

- two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- three compartments for altitude appropriate parachutes inside ejection rigid framework back;
- altitude sensitive sensors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; —laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;
- minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

- a seat chassis able to eject laterally by the opening of an emergency pneumatic
   rocket propelled fixed greater sliding door panel, in which, a operational conventional
   hinged door is housed;
- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar;
- —with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants;
- -an aircraft-fuselage, with a, or, a set-of-seat-chassis' mounted on triple monorails, load bearing triple monorails with one-hundred twenty-six roller trucks and two-hundred fifty-two (or other number) of teflon or other fire resistant material coated,

circumventing roller truck wheels attached to the inner rails monorail roller trucks grid, and a supporting track grid with forty-two roller trucks and eighty-four roller truck wheels (or other number);

-a monorail supporting track;

an outer track, guide rail box to which any seat chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom rotor positioning tail fins slotted within the ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom mounted tail fins can be turned and still exit the launcher platform leg slots;

Laterally ejectable apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

—an ejection guide rail monorail roller truck and roller truck wheels construction, which is a self-ventilating grid formation for ducting heat caused by fire or enemy fire, thereby said ventilating preventing or minimizing track freezing or similar failure of a guide track and rail system due to severe friction of metallic or alloy tracks, a track and guide rail expanding against one another from exposure to very high temperatures;

- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches

attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

— two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

-three compartments for altitude appropriate parachutes;

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; — laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed, seat, apparattii, flotation device located in a bed, seat or apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii in a horizontal degree just prior to lateral ejection to reduce the vertical angle of the human body to the lateral force of a rocket catapult, including using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

- a seat chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;
- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar:

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- —with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection apparattii at a functional and comfortable level and height for the occupant or occupants.
  - 34. (Withdrawn-currently amended) The method for producing lateral ejection [bed] apparattii for helicopter or plane comprising, a-bed

for sleeping, rest, or emergencies attached to long, perpendicularly arranged track, guide rail or apparattii rocket catapulted propelled laterally out of to an aircraft fuselage; interior by a rocket catapult [system];

a monorail [supporting] track;

an outer track[, guide rail box] to which [any bed] chassis or chassis' <u>are</u> [can be] mounted; and ejected laterally, perpendicular to <u>a</u> [the] horizontal longitudinal axis of an aircraft, and guided out of <u>a</u> [the] path of a failed aircraft during ejection flight by two [bottom rotor positioning] tail fins; [slotted within an] <u>a</u> [ejection monorails] launcher platform; legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom-mounted tail fins can be turned and still exit the launcher platform leg slots;

laterally ejectable bed apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection bed apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

an ejection guide rail monorail roller truck and roller truck wheels construction, which is a self ventilating grid formation for ducting heat caused by fire or enemy fire, thereby said ventilating preventing or minimizing track freezing or similar failure of a guide track and rail system due to severe friction of metallic or alloy tracks, a track and guide rail expanding against one another from exposure to very high temperatures;

an emergency [fixed greater sliding] door [panel] with pneumatic rockets located at a [the] top and bottom of the sliding panel or door, which design is prevented from recoiling into a [the] path of an [the] ejecting occupant [and bed device] by spring

loaded latch catches attached to <u>an</u> [the] aircraft frame on <u>an</u> [the] outside of a fuselage;

[two sets of dual] airbags for positioning [the] legs and torso and protecting [the] head, neck and chest of an [the] ejecting occupant, necessary for safe lateral equal access emergency exit ejection;

three or more [compartments for altitude appropriate] parachutes[;].

a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening [the] desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; —laterally ejecting bed apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed bed apparattii separation from an occupant, using a gas powered rotor motor harness, so that the bed apparattii — optionally controlled by a sequencing motor harness provides protective surfaces of a bed apparattii, flotation device located in a bed apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting bed apparattii impacts the ground, water, air or other surface;

minimizing the lateral force on a spine, neck, head and organs of an occupant by using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;

a bed chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater-sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and bed device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; — two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair-of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar;

- with a plane pneumatic rocket or other explosive charge method for a drop down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection bed apparattii at a functional and comfortable level and height for the occupant or occupants;
- with a single and/or double track, track and guide rail system arranged perpendicular to the horizontal longitudinal axis of an aircraft interior;
- in a single or double track construction, a number of rocket catapult chambers are used, which are correspondingly rocket catapult chambers, 1bb, 2bb and/or 3bb. Moreover the lateral ejection tool is sight able by utilizing an aiming mechanism FIG. 1B, directed by a mechanized gear console handle 13B, and swing arm barrel sight

bed swivel 14B for rotor positioning the occupant; only when existing fuselage area allows; actuated by cylindrical telescoping hydraulic arms 15B, and 16B, capable of realizing near perfect, or, perfect theoretical, lateral ejection respective of the real time forward motion (pressure) from velocity and position of a failed aircraft, by targeting preferred bed trajectories 9B, 10B, 11B, 12B, towards any quadrant within a sphere when right and left bipolar bed pairs (or optional opposite directions of lateral ejection)FIG. 1B, are configured in a commercial, medical/emergency, combat or high performance helicopter or plane; if said aiming mechanism operates independent of a robotic arm, which costs would perhaps become prohibitive except in commercial, medical/emergency, luxury aircraft or military designs in an exemplary embodiment;

the aiming mechanism can work by pushing and pulling rotor positions on the lateral ejection track and guide rail with attached bed chassis, swinging from a center console 13B, containing a ceramic tile with alloy or metallic backing blast shield, and a swivel plate 14B, on which a single track, double track or triple monorail track are attached without overburdening the aircraft with additional weight; including attached simply to an aircraft floor or wall without a center console, riser or launcher platforms; — a bed chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

- two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, necessary for safe lateral equal access emergency exit ejection;
- —three compartments for altitude appropriate parachutes, inside ejection rigid framework back;
- a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; —laterally ejecting apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed bed apparattii separation from an occupant, using a gas powered rotor motor harness, so that the bed apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed apparattii, flotation device located in a bed apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting apparattii impacts the ground, water, air or other surface;
- minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a bed apparattii using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;
- laterally ejectable bed apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the

underside or underside and back of a lateral ejection bed apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

- a bed chassis able to eject laterally by the opening of an emergency pneumatic
   rocket propelled fixed greater sliding door panel, in which, a operational conventional
   hinged door is housed;
- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and bed chassis from moving along an inner and/or supporting track and guide rail, failsafe main lock and ignition release key nozzle collar;
- with a plane pneumatic rocket or other explosive charge method for a drop-down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection bed apparattii at a functional and comfortable level and height for the occupant or occupants;

- an aircraft fuselage, with a, or, a set of bed-chassis' mounted on triple monorails, and covered along the guide track end by a teflon mesh or teflon coated metallic mesh end cover;

a monorail supporting track;

an outer track, guide rail box to which any bed chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft during ejection flight by two bottom rotor positioning tail fins slotted within an ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom mounted tail fins can be turned and still exit a launcher platform leg slots;

—laterally ejectable bed apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

a bed chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

- two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- three compartments for altitude appropriate parachutes inside ejection rigid framework back;
- a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; laterally ejecting bed apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed seat, bed or apparattii separation from an occupant, using a gas powered rotor motor harness, so that the apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed apparattii, flotation device located in a bed apparattii frame bottom or panel and/or airbags for the occupant as the laterally ejecting bed apparattii impacts the ground, water, air or other surface;
- minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning apparattii using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;
- a bed chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled-fixed-greater sliding door panel, in which, a operational conventional hinged door is housed;

- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; —two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar;
- with a plane pneumatic rocket or other explosive charge method for a drop down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support launcher platform, column, columns or center console support the lateral ejection bed apparattii at a functional and comfortable level and height for the occupant or occupants;
- an aircraft fuselage, with a, or, a bed chassis or set of bed chassis'mounted on triple monorails, load bearing triple monorails with two-hundred fifty-two roller trucks and three-hundred and four (or other number) of teflon or other fire resistant material coated, circumventing roller truck wheels attached to the inner rails monorail roller trucks grid, and a supporting track grid with eighty-four roller trucks and one-hundred-sixty-eight roller truck wheels (or other number);

a monorail supporting track;

an outer track, guide rail box to which any bed-chassis or chassis' can be mounted, and ejected laterally, perpendicular to the horizontal longitudinal axis of an aircraft, and guided out of the path of a failed aircraft-during ejection flight by two bottom rotor positioning tail fins slotted within an ejection monorails launcher platform legs mold, which fins or rudders at angle theta exit launcher platform leg slots, which is the maximum angle bottom-mounted tail fins can be turned and still exit the launcher platform leg slots;

—laterally ejectable bed apparattii which are aerodynamically able to navigate a life threatening aircraft debris field, by employing a track and guide rail construction of a monorail or monorails type, which uses a tubular airfoil form of monorail working as an airfoil or airfoils, i.e. wings, yaws, fins, flaps, rudders rotary positioned on the underside or underside and back of a lateral ejection bed apparattii, with air current flowing through the empty monorail track tube or tubes, insuring a steady and reliable emergence flight from said aircraft debris field;

—an ejection guide rail monorail roller truck and roller truck wheels construction, which is a self-ventilating grid formation for ducting heat caused by fire or enemy fire, thereby said ventilating preventing or minimizing track freezing or similar failure of a guide track and rail system due to severe friction of metallic or alloy tracks, a track and guide rail expanding against one another from exposure to very high temperatures;

an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling into the path of the ejecting occupant and device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel;

- two sets of dual airbags for positioning the legs and torso and protecting the head, neck and chest of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;
- -three compartments for altitude appropriate parachutes;
- a hermetically sealed fuse box with a rip cord attached to a blast shield in which altitude sensitive sensors and fuses for opening the desired altitude appropriate parachutes are contained; with a gas powered rotor motor harness which is useful and effective, not just at moderate and/or high or tolerable altitudes, but during onboard fires, runway overshooting, very low or zero altitudes, or when over a body of water at a very low or tolerable altitude; whenever a motor harness sequencing completes; laterally ejecting bed apparattii at very low or zero altitudes, during aircraft fires, or water escape flotation, escapes that utilize a delayed bed apparattii separation from an occupant, using a gas powered rotor motor harness, so that the bed apparattii optionally controlled by a sequencing motor harness provides protective surfaces of a bed apparattii, flotation device located in a bed apparattii frame bottom or panel' and/or airbags for the occupant as the laterally ejecting bed apparattii impacts the ground, water, air or other surface;
- minimizing the lateral force on a spine, neck, head and organs of an occupant by either turning a seat or apparattii using side mounted pressure sensitive airbags or other concave, convex or bucket like restraints to create a rigid restraint and confine for the body, head, neck, spine and organs; or using any other bucket, convex or concave forms to restrain a human body during lateral ejection;
- —a bed chassis able to eject laterally by the opening of an emergency pneumatic rocket propelled fixed greater sliding door panel, in which, a operational conventional hinged door is housed;
- an emergency fixed greater sliding door panel with pneumatic rockets located at the top and bottom of the sliding panel, which door or panel is prevented from recoiling

into the path of the ejecting occupant and bed device by spring loaded latch catches attached to the aircraft frame on the outside of a fuselage and pushed into a locked and rigid position by the pneumatic rocket propelled sliding emergency door or panel; — two sets of dual airbags for positioning the legs and torso and protecting the head, neck, spine and organs of the ejecting occupant, and which are mandatory for safe lateral equal access emergency exit ejection;

a anterior side mounted ceramic and alloy or metallic backed blast shield and track support to which a pair of ejection catapult rockets are sealed with collar seals around rocket nozzle ends, until ignited and bursting collar seals with rocket exhaust pressure, thereby preventing a track and seat chassis from moving along an inner and/or supporting track and guide rail, failsafe main-lock and ignition release key nozzle collar;

- with a plane pneumatic rocket or other explosive charge method for a drop down emergency panel or emergency door, and wing strut or support pneumatic removal or other said explosive charge means of wing strut, object or instrument removal from the emergency exit lateral ejection trajectory or pathway;
- a track support-launcher platform, column, columns or center-console support the lateral ejection bed apparattii at a functional and comfortable level and height for the occupant or occupants.
- 35. (Withdrawn-currently amended) An aircraft fuselage for lateral ejection apparattii which is enlarged and has with base, cross beam, mantel beam and/or leg struts additional supporting aircraft fuselage struts and structural supports installed in a [the] fuselage frame structure around an emergency door structure along multiple consecutive aircraft rows positions descending from a nose of an aircraft to a rear of an aircraft. with slender tempered glass panes inserted between the reinforcing struts and structural supports added to the fuselage frame in order to accommodate the

lateral ejection apparattii with the same near number of aircraft seats, and improved or near same field of view for the aircraft pilots, crew, passengers or other occupants; which safe, stable and efficient process, methodology, devices and apparattii, may eject all occupants of aircraft, be they ejected from helicopters or planes, or, like action crossovers, such as gyroplanes or spacecraft designed to fly like planes, and are laterally ejected from an imperiled and life threatening said aircraft;

- providing laterally aligned escape devices for all types of private, business, commercial, government and general aviation aircraft, which lateral ejection apparattii are stable, reliable, simple, efficient, safe and effective at extracting aircraft occupants from life threatening aircraft, whether they are sitting in a seat or lying down in a bed, or in an aircraft cabin or cockpit;
- which method and process of escaping life threatening aircraft by lateral rocket eatapult propulsion and a unique advanced triple (or number larger than 2) parachute configuration to extract pilots, passengers, emergency and medical patients in seats, beds or apparattii from life threatening aircraft by configuring rigid ejection apparattii framework perpendicular to aircraft longitudinal horizontal axis and propelling said occupant or occupants out the side of said aircraft by a rocket catapult system, past an emergency pneumatic rocket actuated sliding aircraft door or panel, wing strut, support or other propelled object in the lateral ejection pathway, so then an automatic parachute system can deploy, and lower or recover the laterally ejected occupant or occupants to the ground or surface;
- with teflon or other fire resistant material, primarily on the outer surface, but not limited to the outer surfaces of a seat or bed or apparattii right and left side mounted, pressure sensitive airbags, and roller truck wheels, and track mesh end cover to prevent fire or enemy fire from burning or hitting the ejected occupant or occupants, or igniting the guide track or igniting the roller truck wheels;

- such that an advantageous arrangement combining the advantages of conventional jet aircraft vertically seeking ejection apparatus with the advantages of lateral ejection apparattii and process is made possible;
- such that rotor positioning apparattii and aircraft occupants for lateral ejection from an upright, rolled or rolling aircraft fuselage is possible;
- when aircraft seats and their occupants can be aligned and usually are in commercial and private aircraft, along the edge of the planes right and left latitudes, and ejected laterally through the side wall, door, canopy openings or opening or space; thereby, when an aircraft is in an upright posture minimizing both the applied force of gravity pulling down on the seat and seat occupant and distance, angle and altitude of recovery and time interval between rocket power ignition and rocket power off during the apparatus transversing from point A to point B;
- —so to be removed by the lateral ejection apparattii powered by a rocket catapult and moving from point A to point B along the same or near same gravitational plane along a preferred angle of descent and recovery when ejected laterally from a plane in a dangerous or life threatening descent;
- so that an automatic, individual parachute system can be automatically activated and deployed to break and stabilize the plane occupant(s) descent to a surface, after ejecting laterally from a plane;
- with separately falling seats and parachutists in aircraft that are laterally ejected perpendicular to the horizontal longitudinal axis of an aircraft fuselage in seat rows aligned in aisles on a reloading chain and gas engine powered track and guide rail lateral ejection apparattii are also constructed for laterally ejecting aircraft occupants who are arranged in rows and aisles.

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## METHOD FOR PRODUCING LATERAL EJECTION APPARATTII FOR HELICOPTER OR PLANE

## **ABSTRACT**

An aircraft occupancy, [here a helicopter] with a seat chassis mounted on a set of rails of any type, ideally as I have demonstrated on load bearing triple monorails with one hundred sixtyeight circumventing roller trucks attached to [the] inner rails, an outer track box movable along [the] inner tracks, and a monorail supporting track with eighty-four roller trucks: Shown here in a side view with partial delineation of an [the mesh] end cover. Any seat chassis attached to an [the] outer track box is ejectable along a lateral trajectory, perpendicular to a [the] horizontal longitudinal axis of an aircraft, and guided out of a [the] path of a failed aircraft during ejection flight by two bottom positioned tail fins slotted within [the] ejection monorails launcher platform legs. A [The] seat chassis is enabled to eject laterally since a conventional hinged door is operational within a greater sliding door panel which pneumatic rockets at a [the] top and bottom of a [the] sliding door transverse a [the] greater emergency sliding door panel including an [the] interior fixed conventional hinge operational door out of a [the] path of a [the] seat chassis or chassis' attached to an [the] outer track box towards a [the] rear of an [the] aircraft where a [the] sliding greater panel is prevented from recoiling by a [common] latch catches. [Dual] Airbags for positioning [the] legs and torso of an occupant for a safe emergency exit ejection are

embedded or attached to the structure directly fore of <u>a</u> [the] seat chassis. A second set of airbags, head, neck and chest protector are connected on both sides of <u>a</u> [the] seat chassis, mandatory for safe lateral equal access emergency exit ejection. Three compartments for altitude appropriate parachutes and sensor fuse box for opening said desired chute.

Including an interior side mounted blast shield and monorails inner tracks support to which a couple of rocket catapults are fixed by seals at their ignition points, holding <u>an</u> [the] outer track box and seat chassis stationary between [the] inner tracks and supporting track.